

SCOTTSDALE TRANSPORTATION COMMISSION REPORT

To: Transportation Commission
From: Todd Taylor, Senior Traffic Engineer
Bill Moloney, Police Photo Enforcement Manager
Meeting Date: July 18, 2013



ITEM IN BRIEF

Action: Information

Purpose: To provide an overview of the Photo Enforcement Program in Scottsdale.

Key Considerations:

The City of Scottsdale has used photo enforcement technology since 1996 to supplement Police Department efforts to reduce red-light running and speeding. The City contracts with a vendor to operate photo enforcement cameras at fixed locations and with mobile photo enforcement vans.

Red-light citations are issued only when vehicles enter an intersection after the light has turned red. Speed citations are issued only when a vehicle is moving at 11 mph or faster above the speed limit, or 6 mph or faster over the limit in school zones. At the fixed locations at intersections, cameras photograph both red-light runners and speeders. At mid-block locations, cameras photograph only speeders.

The City Council approved a new five year contract on December 4, 2012 with American Traffic Solutions (ATS). The City of Scottsdale's Photo Enforcement program is a turnkey service contract with ATS. The City oversees all aspects of the photo detection and enforcement technology through this contract. The City controls the site selection process for both fixed and mobile detection systems. The Police Department controls the final review and authorization of any citations that are issued. Fiscally, the program is self-supporting through fine revenue collected.

The photo enforcement fixed sites (permanent facilities at intersections, mid-block locations, and near schools) under this new contract will be deployed as follows:

Dir.	N/S Street	E/W Street	Status
INTERSECTION LOCATIONS: Red Light Running & Speed Enforced			
E/B	Scottsdale	McDowell	Existing
S/B	Scottsdale	McDowell	New Site
N/B	Scottsdale	Thomas	Existing
E/B	Hayden	Thomas	New Site
E/B	90th Street	Shea	Existing
S/B	Scottsdale	Shea	Existing
E/B	Greenway/Hayden	FLW	New Site
S/B	FLW	Cactus	New Site
E/B	64 th	Thomas	New Site
S/B	TPP	Bell	New Site

MID-BLOCK LOCATIONS: Speed Enforced			
N/S	Pima	Hualapai	Existing
E/W	120 th	Shea	Existing
E/W	Alma School	Dynamite	New Site

SCHOOL LOCATIONS Speed Enforced – School Zone			
E/W	124 TH	Via Linda	New Site

Under the new contract all new fixed sites will be using a new technology developed by ATS called AutoPatrol™ 3D. AutoPatrol™ utilizes three-dimensional radar tracking that measures speed and position of the vehicle. An advantage of the system is that there will no longer be the need to cut loops into the roadway since the detection is done using the video cameras that utilize the 3D radar tracking.

The new contract reduced the number of mobile photo enforcement vans from four to two; however, the contract includes two new Portable School Towers. The two Portable School Towers will be primarily deployed in school zones or in other areas where the size of the vans make it difficult to operate. The mobile photo enforcement vans are scheduled and deployed on a weekly basis. The deployment locations are scheduled and rotated among the 31 school locations in Scottsdale, high or severe accident locations, and input from citizens, Traffic Engineering and other Police personnel.

Photo Enforcement enhances the safe movement of traffic by encouraging better driving habits, driving at the designated speed limit, and stopping for red lights. Additionally, photo enforcement equipment is deployed 7 days a week, 24 hours a day for maximum coverage. Additionally, the Photo Enforcement Unit appears at many community

functions, schools and events to answer questions and promote safer streets and better driving habits.

The “Focus on Safety” photo enforcement program generates revenue from the City’s portion of fines paid by the red light and speed violators. These fines cover the costs to run the program.

Attachment 1: PowerPoint presentation

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Focus On Safety

SCOTTSDALE POLICE DEPARTMENT

Transportation Commission
July 18, 2013

Photo Enforcement Program
Education, Engineering, Enforcement

FOCUS ON SAFETY - Approach

- (2) Full Time Motor Squads
- Night Time Traffic/DUI Squad
- VCRU Unit
- Patrol Beat Team
- Traffic Engineering
- Media (PIO, CAPA, Outside Media)
- Photo Enforcement Unit

Focus On Safety

- Traffic collisions were the world's 10th leading cause of death in 2002 (to be 8th by 2030!)
- 135 persons injured every day (2011)
- 825 people were killed in Arizona (2011)
- 1 person killed every 10.6 hours in AZ(2011)
- 3,529 Collisions in Scottsdale with 15 Fatalities (2010)

Mission

- Move traffic and people to their destinations in a safe and timely manner
- Reduce deaths, injuries and financial losses
- Obtain voluntary driver compliance

Focusing on Safety

DATE	TIME	LIMIT	SPEED	LANE	FRAME
04/23/2012	10:20:35.0 PM	050	119	3	A
SD02-WB SHEA BLVD @ 120TH ST					



Benefits

- EFFICIENT USE of RESOURCES !!!
 - Acts as a police force multiplier
 - Allows officers to handle other calls
 - Officers can react to camera activations
- Program funded by violators NOT taxpayers.

Collision Reduction for PE Sites

Change During Contract FY 07-12

Scottsdale/McDowell	-20%
Scottsdale/Thomas	-12%
Scottsdale/Shea	-20%
Scottsdale/Cactus	-16%
90/Shea	-25%
Scottsdale/FLW	-27%
Hayden/McDowell	64%*
Pima/Hualapai	-64%
120/Shea	-20%
Overall Collision Reduction	-24%

Photo Enforcement Locations

Intersections: Red Light Running & Speed

E/B	Scottsdale	McDowell	Existing
S/B	Scottsdale	McDowell	New Site
N/B	Scottsdale	Thomas	Existing
E/B	Hayden	Thomas	New Site
E/B	90th	Shea	Existing
S/B	Scottsdale	Shea	Existing
E/B	Greenway-Hayden	FLW	New Site
S/B	FLW	Cactus	New Site
E/B	64th	Thomas	New Site
S/B	TPP	Bell	New Site

Photo Enforcement Locations

Mid-Block: Speed

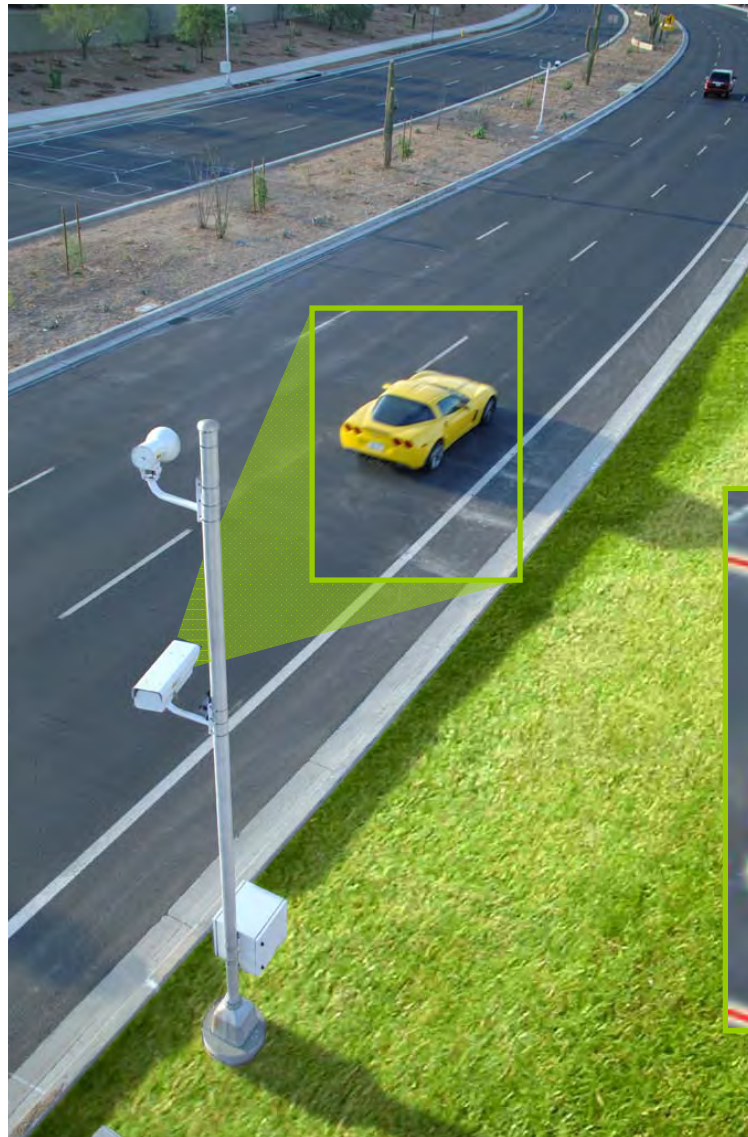
N/S	Pima	Hualapai	Existing
E/W	Shea	120 th	Existing
E/W	Dynamite	Alma School	New Site

School Site: Speed

E/W	124th	Via Linda	New Site
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Fixed Site Speed Cameras



- The vehicle passes over embedded sensors
- Based on the known distance between the sensors and the time between hits, the speed is calculated



- If the speed meets or exceeds the enforcement threshold, an image is taken from behind the vehicle to identify the license plate
- The camera then captures a separate image from the front of the vehicle to identify the driver

Speed Feedback Signs

120th and Shea - Westbound



AutoPatrol RLSC-3D Benefits

AUTOPATROL™ RLSC-3D
RED LIGHT SAFETY CAMERA SOLUTION

- **Non-Invasive Radar Detection Device**
- **Simultaneously Tracks Approx. 20 Vehicles and Identifies Vehicle's Trajectory and Velocity**



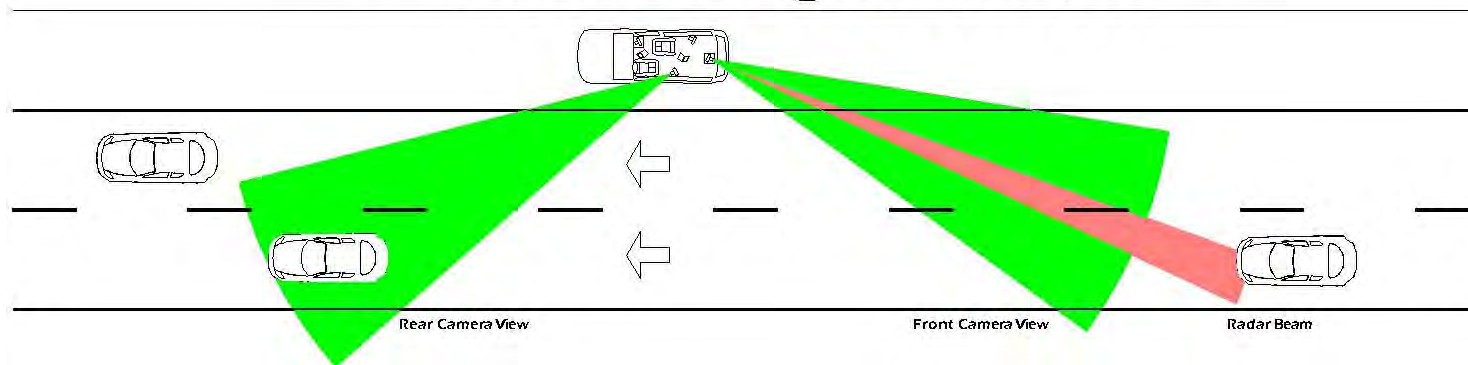
AutoPatrol™



Vehicle Speed



Deployment from Right Side of Road Enforce Single Direction



- A vehicle enters the radar beam, which measures the vehicles speed
- If the measured speed meets or exceeds the enforcement speed an image is taken of the driver
- After a time interval, images are taken to capture the license plate

Portable School Towers



Portable School Towers



Questions

Thank you for your interest in the Focus On Safety program, and for taking the time to attend this presentation. Please feel free to call me direct at (480) 312-7071, or contact us by e-mail at: photoenforcement@scottsdaleaz.gov